Brocade Communications Systems, Inc.

Statement of Michael Klayko

Advisor and Former CEO, Brocade

for the Committee on Oversight and Government Reform

"Wasting Information Technology Dollars:

How Can the Federal Government Reform its IT Investment Strategy?"

January 22, 2013

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Testimony by Michael Klayko, Advisor and Former CEO

Good afternoon. I'd like to thank Chairman Issa and Ranking Member Cummings, as well as the members of the Committee, for inviting us to present testimony in today's hearing and for your work to reduce waste in federal Information Technology (IT) spending. I say this both as a business leader and as a taxpayer!

I served as CEO of Brocade Communications Systems Inc., from 2005 until just last week when the Company announced a new CEO, Lloyd Carney. I remain an employee and advisor to the company during this transition period. I have visited Washington DC several times a year and am honored to speak with you today. Prior to Brocade, I held executive roles at other high-tech companies and I have a deep understanding of, and direct experience with, the kinds of issues I believe you're interested in discussing.

Today I would like to share Brocade's experience with the way the federal government acquires IT equipment and services. My perspective is that of a CEO chartered with managing the growth of a company. Brocade is a true Silicon Valley start-up: what started as an innovative idea from four guys with a dog and a keg of beer became a $2 plus billion company that leads in its market through innovation and fierce competition. Brocade sells more than $250 million dollars annually of network technology to the federal government. These technologies are the backbone of our Nation's critical infrastructure.

What challenges do we see today?

When federal agencies rely on a single original equipment manufacturer (OEM) for IT solutions – like networking – it creates a situation where the majority of spending goes to supporting legacy environments in equipment, operations, and maintenance. This is wasteful and denies Federal agencies the benefits that come from more competitive and innovative environments.

One common practice that we have observed in Federal IT procurement is the use of "brand name or equivalent" requirements. I want to be clear: we agree that there are situations where you need to specify a particular brand or product, and in those cases a sole source justification can be made when no other technology is available to meet the requirement. But I am not talking about these cases today.

Instead, I'd like to focus on cases where federal purchasing organizations use brand name requirements in Requests for Proposal (RFPs), Requests for Quote (RFQs) or Technical Reference Models (TRMs). An example device is listed by name and part number (for example, the "ABC Router 2000") to signal the type of device or technology being sought in the bid, and that is followed by the phrase "or equivalent".

Brand name or equivalent requirements incorporate all the features and functions of a particular brand name product. However, all of these specific features and functions may not actually be needed by the agency to meet its mission.

I'll give you a simple example that involves something I love: fly fishing. The fishing rod manufacturer I like adds a lighted reel and rod tip to the rod. Granted, it's a more expensive rod, and it would likely have a higher maintenance cost. It certainly doesn't make me a better fisherman, but I kind of like it anyway. Now, when my friends are looking to buy fishing rods, they ask me which one I use and I tell them. They don't need a lighted tip or reel on the rod either, but they end up with one anyway. They probably spent more than they needed to, and maybe they missed out on an even more recent development – like the solar-powered lights versus a battery powered or fluorescent, who knows?

System integrators see brand name or equivalent requirements and they don't want to use non-"ABC" products in their bids. They're concerned that the technical committee will reject the proposal if the package does not include the specific "ABC Router 2000." They are also concerned with the extra time and effort needed on the part of the technical evaluation committee to evaluate a different offering.

In the purchase of information technology, this creates the perception of bias and limits the technology that integrators and value added resellers can provide. The combination of the proprietary features of the brand and the bias created dramatically limits the available alternatives and hampers the ability of government contracting officials to fairly evaluate solutions.

Ultimately, depending on a single OEM for the majority of any IT solution increases costs in two important ways: (1) by limiting competition, and (2) by missing out on innovation.

(1) Competition – let me give you an example:
Within the DOD, the Army's Installation Information Infrastructure Modernization Program (I3MP) and the Air Force's Combat Information Transport System (CITS) program both require in their TRM that a vendor must be Joint Interoperability Testing Center (JITC) Certified. They do not use brand name device examples, but instead rely on the JITC to ensure a product meets security and other mission critical requirements. If a vendor's products are on the JITC list they can be included on a bid for these programs. This has opened competition and now the Army sees bids with improved pricing on hardware compared to civilian agencies.

(2) Innovation: Another example:
Some federal agencies frequently reference a specific product in a TRM that is now 12 years old. I'm from Silicon Valley, where we live by Moore's Law. The pace of innovation in IT is such that performance, reliability, and energy efficiency improvements introduced in the last 18 months or less can provide superior advantages. Even when purchasing agents or end users request access to newer technology, they can often be denied the ability to acquire products not specifically named in a TRM.

There is a solution to all of this – open industry standards
When acquiring IT equipment and services, federal agencies should seek out features, functions and capabilities – relying on open industry standards - to maximize competition and innovation. We see an effort to promote and support greater technical expertise and resources for procurement officers

in the Chairman's draft bill and we think this will go a long way to helping the situation. Federal agencies should establish whenever possible a set of publicly available specifications against which manufacturers can test and certify their products.

We see another great example in the Department of Veterans Affairs (VA) memo of August 17 2012 entitled: "Open Standard Protocols for VA Networks". This memo describes the decision to migrate from proprietary protocols to open standard protocols on the VA's data networks, in order to enable participation from any vendor. All of this will support cost containment strategies and increase the VA's flexibility and ability to interoperate with multiple vendors.

We're not the only ones saying this either. A Gartner report from 2010 called "Debunking the Myth of the Single-Vendor Network" showed that there is no financial, operational, or functional basis for the argument that a single-vendor network will lower the total cost of ownership for a network infrastructure. They go on to say, in fact, that introducing competition into your network decision process will lower your capital and maintenance costs by a minimum of 30%.

In closing, the use and adoption of open industry standards and multi-vendor networks by federal agencies will reduce costs, increase competition, promote innovation, facilitate interoperability, and provide greater return on investment. The Federal government can send a powerful signal to the IT industry that it values innovation and competition. This will benefit the U.S. economy by encouraging continued investment in R&D, placing value on intellectual property, and creating IT sector jobs in the United States. These practices also drive innovation that sparks new ideas that lead to new companies. These practices reduce waste and promote efficiencies.

Thank you for the opportunity to testify before you today. I look forward to your questions and our continued discussion.

White Paper:

"The challenges and benefits of greater competition in federal IT procurement"

Federal agencies face a range of requirements for information technology infrastructure and must work diligently to design and implement strategic roadmaps that will serve the technology needs of their constituencies for years to come. Limits on budget consistency and visibility introduce additional burdens to planning and implementation. The requirement to provide more and better services for citizens while decreasing the cost of providing those services is a challenge and top priority facing all Federal agencies today.

Federal purchasing organizations frequently are provided and forced to use name-brand requirements when publishing Requests for Proposals (RFPs), Requests for Quote (RFQs) and/or Technical Reference Models (TRMs). In these cases, an example device is listed by name and part number (e.g., the ABC Router 2000) to signal the type of device or technology being sought in the bid. In other cases, the RFP may be brand-name agnostic while referring to a TRM that contains brand name devices as examples.

Brand name or equivalent requirements incorporate all the features and functions of a particular Brand name product. All of the features and functions provided by the brand name product may or may not be an actual requirement needed by the Federal agency to meet its mission. This limits competition and restricts solution innovation. Federal agencies should whenever possible state and evaluate in terms of generic features, functions and capabilities including open industry standards to maximize competition and innovation for information technology solutions.

System integrators and others in the prime contractor role see Brand name or equivalent requirements and are unlikely to include ABC competitors' products in their bids for fear of being rejected. They are concerned that the technical committee reviewing the bid will reject the proposal for not meeting the TRM specifications if the package does not include the specific ABC Router 2000, in this example. They are also concerned with the extra time and effort needed on the part of the technical evaluation committee to evaluate a non-brand name offering and the increased complexity in evaluation process lessens their chance of winning. In many cases the RFP and RFQ is being issued on the premise of commercially available information technology products or services and being evaluated on a lowest price technically acceptable basis where no evaluation teams or committees are set up to evaluate the offers.

Relying on brand-name requirements instead of functional requirements denies federal agencies two important benefits: cost savings and access to innovation.

<u>Cost savings</u>

Within the DOD, the Army's Installation Information Infrastructure Modernization Program (I3MP) and the Air Force's Combat Information Transport System (CITS) program both require in their TRM that a vendor must be Joint Interoperability Testing Center (JITC) Certified. They do not use brand name

device examples, but instead rely on the JITC to ensure a product meets security and other mission critical requirements. If a vendor's products are on the JITC list they can be included on a bid for these programs. This has opened competition and now the Army sees bids with improved pricing on hardware compared to civilian agencies.

Innovation

Purchasing agencies also miss out on recent innovations when they refer to a specific brand names and products in TRMs. For example, some agencies frequently reference a specific product in a TRM that is now 12 years old. While familiarity with a specific product can be beneficial, the pace of innovation in IT is such that performance, reliability, and energy efficiency improvements over 12 years can provide superior advantages. Even when purchasing agents or end users request access to newer technology, they can often be denied the ability to acquire products not specifically named in a TRM.

Federal IT purchasing practices should be adapted to take advantage of functional requirements in TRMs and Requests for Proposals. This practice, already proven effective within some DOD agencies and recognized as a valuable policy direction in the VA, would result in cost savings and the benefit of greater technological innovation inside the federal government. Relying on name brand requirements limits the ability of primary contractors to seek out the most competitive solutions for the purchasing agency.

Support for multi-vendor networks, open standards, and competition in IT procurement

Memo from Roger Baker, CIO, VA: "Open Standard Protocols for VA Networks"

Release date: August 17, 2012

Key statements:

- This memo codifies the decision to migrate from proprietary protocols to open standard protocols on VA's data networks, in order to enable participation from any vendor.
- Migrating to open standard protocols supports cost containment strategies, and will increase VA's flexibility and ability to interoperate with multiple vendors.
- Leaders in new technologies are constantly changing - improved interoperability, innovation and open competition will enable rapid advances in network infrastructure capabilities at the lowest possible costs.

Gartner report: "Debunking the Myth of the Single-Vendor Network"

Publication Date: November 17, 2010

Key findings:

- The idea of a single-vendor network has been promoted by Cisco as a way to simplify operations, ensure reliability and lower the total cost of ownership (TCO) for a network infrastructure. However, it is clear that in most cases today there is no financial, operational or functional basis for this argument.
- Introducing competition into your network decision process will lower your capital and maintenance costs a minimum of 30%.

Case studies highlighting non-competitive trends in Federal IT procurement

Federal Bureau of Investigation - Solicitation Number FBI-12-17-Cisco
Posted July 9, 2012
Amount: $830M over five years

Description: Solicitation for multiple purchases of brand name specific Cisco networking equipment, hardware maintenance, software support and engineering support for the entire FBI
Non-competitive attributes:

- The FBI is operating under several flawed assumptions: 1) maintenance and support for old Cisco equipment will cost less than the purchase of new equipment from other vendors, 2) acquiring vendors other than Cisco will result in security vulnerabilities, and 3) pursuing competitive equipment alternatives would lead to schedule delays.

U.S. Air Force - Base Area Network (BAN) Functional Specification
Published January 2012
Amount: impacts the several hundred Air Force installations in the U.S.

Description: Provides standard network design, configuration and best practice information to facilitate the transition to a single vendor for network infrastructure equipment at every Air Force base.
Non-competitive attributes:

- The Air Force erroneously contends that a single-vendor network is needed to facilitate the operation and management of its base networks; it also fails to consider the risks added by relying on a single vendor, including limited supply chain availability and diversity, security issues, functional limitations, and base-to-base inconsistencies.

U.S. Army - Solicitation Number HC1028-12-R-0045
Posted May 10, 2012
Amount: $578M over five years

Description: Solicitation for Cisco SMARTnet maintenance coverage for the Army's Cisco assets. Also establishes an enterprise license agreement to consolidate existing Cisco SMARTnet contracts.
Non-competitive attributes:

- The Army fails to recognize that older proprietary Cisco technology can be replaced with newer, more efficient and capable standards-based technology at a cost less than the current support cost for older Cisco technology. The RFP specifically limits consideration of alternative routing and switching solutions that are available from a number of network suppliers.

Resume of Michael Klayko

Michael Klayko, Saratoga, CA

Brocade Communications January 2003- January 2013

Brocade is a developer and manufacturer of Networking products and solutions. Founded in 1995 and headquartered in San Jose CA., the company has approximately 5000 employees worldwide and serves a large range of customers and industries in more than 160 countries, including 96% of the Global 2000. Revenues for 2012 were $2.3B

CEO January 2005- January 2013

SVP Sales, Marketing and Support March 2003- January 2005

Joined Brocade when Rhapsody Networks was acquired by Brocade in January 2003. After integrating Rhapsody products and personnel into the Brocade infrastructure (4 months) my role was to restructure the current sales, marketing and support organization. During the restructuring assignment the company was required to replace the current CEO and the Board asked me to become the CEO.

During my time as CEO

Revenue has grown from $525M to $2.3B (approximately 4X)
Profit from $3M to $570M (approximately 190X)
Employee base from 1,200 to 5,000
Retention from 31% annual attrition to 9% annually
Employee satisfaction to over 91% and listed as Fortune's 100 Best Places to Work

Rhapsody Networks March 2001- January 2003

CEO

Rhapsody was a start-up focusing on developing a Router for Storage Area Networks. We raised two rounds of funding during the company's brief history and 5 months after the Series B, we sold Rhapsody for $275M to Brocade. The routing technology developed by Rhapsody and marketed by Brocade is currently the Industry Standard that all Storage Routers use when deploying networks in heterogeneous Data Centers.

McDATA Corporation November 1997- January 2001

EVP Sales and Marketing

McDATA developed and manufactured Storage Area Networking products and solutions for the Global 1000 market place. We were a start-up focused on developing solutions for managing the server and storage proliferation that large enterprises were finding difficult to manage. Our solutions met the demanding requirements of the Global 1000 enterprises and we decided to make a public offering. We went public in August 1999, with profitable revenues at the time of approximately

$160M and growing at over 100% annually. Our market debut was very successful and our market capitalization reached a high of $14.7B within 6 months of our IPO.

EMC Corporation August 1993- November 1997

SVP Sales

Joined EMC to develop the Sales organization during EMC's transition from memory product sales to marketing and selling Storage Systems. During my time as the SVP of Sales we grew revenues by an average of 65% annually. I believe the EMC Sales organization was one of the finest and most focused sales organizations in all of the technology industry. During this time the stock price of the company also increased from less than $2 share to an adjusted price of $150 share.

Hewlett Packard August 1989- August 1993

Group Marketing Manager, Computer Systems Organization

Responsible for developing and marketing solutions and products that operate on the Unix operating system. and developing the partnerships and sales channels to deliver those solutions. Managed a group of approximately 1400 worldwide employees.

International Business Machines (IBM) April 1979- August 1989

Various sales, marketing, product, management and executive assignments in 5 locations during a 10-year career.

Docutel Corporation December 1975- April 1979

Docutel was the original designer and manufacturer of the Automated Teller (ATM) I was an engineer assigned to develop the card reader, and also field install the initial equipment at the bank locations.

Education

Ohio Institute of Technology

Bachelors Electronic Engineering — Graduated December 1975

Babson College
-Entrepreneurial Executive Education Program — August 1982
-Sponsored by IBM

UCLA
-Anderson School of Business
Public Board education and certification — September 2008

Stanford
-Stanford Law School
Public Board education for Corporate Governance — August 2010

Personal

Married for 37 years, four children, seven grandchildren.

Enjoy: fly-fishing, skiing, back-country snowmobiling, golf, hunting, ocean kayaking, long distance running, reading, helping others through charitable works.

Committee on Oversight and Government Reform

Witness Disclosure Requirement – "Truth in Testimony"

Required by House Rule XI, Clause 2(g)(5)

Name: **Michael Klayko**

1. Please list any federal grants or contracts (including subgrants or subcontracts) you have received since October 1, 2010. Include the source and amount of each grant or contract.

   None.

2. Please list any entity you are testifying on behalf of and briefly describe your relationship with these entities.

   Brocade Communications Systems, Inc.
   Advisor and Former CEO, see resume for additional details.

3. Please list any federal grants or contracts (including subgrants or subcontracts) received since October 1, 2010, by the entity(ies) you listed above. Include the source and amount of each grant or contract.

   Federal Grants:
   To the best of my knowledge, the following are the Federal grants received by the entity listed above since October 1, 2010.

   - **Brocade Communications Systems, Inc. received a $390,000 grant by the City of San Jose Office of Economic Development as part of the city's Clean Tech Careers Project. Funds were disbursed to Brocade sometime after May 12, 2011. Funding was part of the American Recovery and Reinvestment Act (ARRA). The funding came through the Recovery Act Community Development Fund (CDBG) Formula Grant Program which is administered by the Housing and Urban Development Department http://portal.hud.gov/hudportal/HUD.**

   Federal Contracts:
   To the best of my knowledge, the following are the Federal contracts received by the entity listed above since October 1, 2010 . See following page for a list of contracts by date.

I certify that the above information is true and correct.

Signature: Michael Klayko Date: January 18, 2013

"Truth in Testimony" (Continued)

List of Contracts

CUSTOMER	END USER	DATE	DOLLAR AMOUNT
US ARMY	ARMY TEC	10/19/2010	$ 46,338.90
CIVILIAN GOVT	SANDIA NATIONAL LAB	10/29/2010	$ 77,050.80
US AIR FORCE	CIVIL AIR PATROL, MAXWELL AFB	11/2/2010	$ 20,596.45
INTEL	MPO, FT MEADE MD	11/5/2010	$ 78,996.00
CIVILIAN GOVT	ARGONNE NATIONAL LAB	11/15/2010	$ 1,610.20
US AIR FORCE	MACDILL AFB, FL	11/16/2010	$ 1,580.40
US ARMY	FT HUNTER LIGGETT, CA	12/2/2010	$ 2,457.00
CIVILIAN GOVT	PPPL, NJ	1/6/2011	$ 3,147.08
CIVILIAN GOVT	FBI, MD	1/18/2011	$ 3,902.40
CIVILIAN GOVT	BROOKHAVEN NATIONAL LAB, NY	4/14/2011	$ 11,040.00
CIVILIAN GOVT	FTC, WASHINGTON DC	4/21/2011	$ 2,521.05
US AIR FORCE	LACKLAND AFB, NM	5/25/2011	$ 676.00
CIVILIAN GOV'T	ARGONNE NATIONAL LAB	6/6/2011	$ 214,293.42
INTEL	NGIC, VA	6/10/2011	$ 218,832.71
CIVILIAN GOV'T	ARGONNE NATIONAL LAB	6/24/2011	$ 201.60
CIVILIAN GOV'T	ARGONNE NATIONAL LAB	7/11/2011	$ 201.60
US ARMY	FT DRUM, NY	7/19/2011	$ 1,821.85
CIVILIAN GOVT	ARGONNE NATIONAL LAB	8/5/2011	$ 2,580.30
INTEL	MPO, FT MEADE MD	8/19/2011	$ 16,514.00
INTEL	MPO, FT MEADE MD	9/21/2011	$ 10,014.78
INTEL	MPO, FT MEADE MD	9/22/2011	$ 7,960.50
INTEL	MPO, FT MEADE MD	9/28/2011	$ 47,705.00
INTEL	MPO, FT MEADE MD	9/30/2011	$ 42,905.68
INTEL	MPO, FT MEADE MD	9/30/2011	$ 206,428.32
CIVILIAN GOVT	ARGONNE NATIONAL LAB	10/4/2011	$ 1,610.00
CIVILIAN GOVT	SANDIA NATIONAL LAB	10/11/2011	$ 54,637.00
CIVILIAN GOVT	US COAST GUARD, VA	10/27/2011	$ 14,977.35
CIVILIAN GOVT	NOAA, FAIRBANKS AK	11/9/2011	$ 4,486.00
CIVILIAN GOVT	LANL	11/18/2011	$ 2,932.00
CIVILIAN GOVT	ORNL	11/30/2011	$ 7,518.00
US AIR FORCE	CIVIL AIR PATROL, MAXWELL AFB	11/30/2011	$ 18,775.00
US AIR FORCE	CIVIL AIR PATROL, MAXWELL AFB	11/30/2011	$ 18,775.00
CIVILIAN GOVT	FTC, WASHINGTON DC	12/12/2011	$ 1,750.00
CIVILIAN GOVT	PPPL, NJ	12/14/2011	$ 2,940.15
US ARMY	ERDC, VICKSBURG	12/14/2011	$ 115.00
INTEL	DCFM, FT MEADE MD	12/15/2011	$ 6,923.00
INTEL	MPO, FT MEADE MD	1/23/2012	$ 2,612.00
INTEL	MPO, FT MEADE MD	1/24/2012	$ 286.00
INTEL	MPO, FT MEADE MD	2/7/2012	$ 17,485.00
INTEL	MPO, FT MEADE MD	2/21/2012	$ 74,290.18
US ARMY	REDSTONE ARSENAL	3/9/2012	$ 1,498.00
CIVILIAN GOVT	FTC, WASHINGTON DC	3/26/2012	$ 4,910.49
CIVILIAN GOVT	NIH, BETHESDA	3/28/2012	$ 495.00
US AIR FORCE	LACKLAND AFB, TX	5/2/2012	$ 614.00
CIVILIAN GOVT	BROOKHAVEN NATIONAL LAB	5/18/2012	$ 11,040.00
CIVILIAN GOVT	LOS ALAMOS NATIONAL LAB	7/3/2012	$ 44,113.00
CIVILIAN GOVT	NOAA, BOULDER CO	8/9/2012	$ 6,080.00
CIVILIAN GOVT	LANL, NM	8/23/2012	$ 29,735.00
CIVILIAN GOVT	OPM, WASHINGTON DC	8/27/2012	$ 130,477.68
US NAVY	NAVAL POST GRADUATE	9/11/2012	$ 1,304.00
INTEL	MPO, FT MEADE MD	9/22/2012	$ 682.00
INTEL	MPO, FT MEADE MD	9/26/2012	$ 8,042.00
CIVILIAN GOVT	SANDIA NATIONAL LAB	10/26/2012	$ 54,637.00
US AIR FORCE	CIVIL AIR PATROL, MAXWELL AFB	12/3/2012	$ 18,775.00
CIVILIAN GOVT	ARGONNE NATIONAL LAB	12/17/2012	$ 3,086.00
INTEL	MPO, FT MEADE	1/2/2013	$ 1,140.00
INTEL	MPO, FT MEADE	1/3/2013	$ 53,142.30